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10/550,405	09/23/2005	Toru Sasabe	P28520	2290
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EXAMINER DAVE, JYOTI D				
ART UNIT 2191		PAPER NUMBER		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

gbpatent@gbpatent.com
pto@gbpatent.com

Office Action Summary

Application No.

10/550,405

Applicant(s)

SASABE, TORU

Examiner

JYOTI D. DAVE

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 May 2008.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-14 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 10/550,405.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SG/IC)
Paper No(s)/Mail Date 3/13/2006 4 pages and 12/15/2005 4 pages
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Kahn et al. (6,525,775 B1).

In reference to claim 1:

A data reproduction apparatus for reproducing data recorded in a recording medium, and capable of being connected via an interface bus to a video display apparatus that operates according to software, comprising:

a transmitter that transmits video data and audio data read from the recording medium (Col. 2, lines 20-25, a television receiver which is coupled to a source of recorded video signal to receive an digital multi-program stream containing video, audio and data programs), **using a first area and a second area respectively** (Fig. 2, elements 120 and 160, a video decoder and a audio decoder) **to said video display apparatus via said interface bus** (Col. 3, lines 16-21, communications channel is a IEEE 1394 bus. The digital VCR receives and provides digital audio, video and data program over the channel); **and**

a controller that controls said transmitter to transmit, at the time of a software update for

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said video display apparatus (Fig. 1, element 104 and Col. 4, lines 30-35, a remote control receiver which may receive commands from the remote control unit and provide these commands to the CPU of the transport decoder), **update software read from the recording medium to said video display apparatus via said interface bus** (Col. 3, lines 16-21 and Fig. 3, element 334, a communication channel which is a IEEE 1394 Bus which transmits software update data), **using a third area for transmission of additional data that is different from said first and second areas** (Fig. 3, elements 324, 330 and 334, a video stream, audio stream and data stream which are separate streams), **while indicating the software update to said video display apparatus** (Col. 7, lines 40-45, the software update data may also include verification features such as CRC codes or digital certificates which may be processed by other processes in the microprocessor to verify that the program code is correct and complete before it is used).

In reference to claim 2:

The data reproduction apparatus according to claim 1, wherein information related to the software update is further recorded in the recording medium (Col. 2, lines 20-25, a television receiver which is coupled to a source of recorded video signal to receive an digital multi-program stream data programs; see Col. 7, lines 35-45, where the data programs include software upgrade data), **and said controller controls, at the time of the software update for said video display apparatus** (Fig. 1, element 104 and Col. 4, lines 30-35, a remote control receiver which may receive commands from the remote control unit and provide these commands to the CPU of the transport decoder), **said transmitter to transmit the related information read from the recording medium to said video display apparatus** (Col. 2, lines 20-25, a television receiver which is coupled to a source of recorded video signal to receive an digital multi-program stream containing video, audio and data programs) **via said interface bus** (Col. 3, lines 16-21 and Fig. 3, element 334, a communication channel which is a IEEE 1394 Bus which transmits software update data), **using said first area and/or said second area** (Col. 6, lines 42-45, the

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IEEE 1394 channel provides an ATSC transport stream which includes at least a data program but may also include one or more video or audio programs).

In reference to claim 3:

The data reproduction apparatus according to claim 2, wherein said related information includes audio data (Col. 7, lines 8-11, combination of programs (i.e. video, audio and data) which together form a single presentation), **and said controller controls said transmitter, at the time of the software update for said video display apparatus** (Fig. 1, element 104 and Col. 4, lines 30-35, a remote control receiver which may receive commands from the remote control unit and provide these commands to the CPU of the transport decoder), **to transmit the audio data in said related information read from the recording medium to said video display apparatus** (Col. 6, lines 67 and Col. 7, lines 1-11, data structures in the transport stream (including a multi-program transport stream including combinations of programs (video, audio and data)) **via said interface bus** (Col. 3, lines 16-21 and Fig. 3, element 334, a communication channel which is a IEEE 1394 Bus which transmits software update data), **using said second area** (Col. 6, lines 42-45, the IEEE 1394 channel provides an ATSC transport stream which includes at least a data program but may also include one or more video or audio programs).

In reference to claim 4:

The data reproduction apparatus according to claim 2, wherein said related information includes video data (Col. 7, lines 8-11, combination of programs (i.e. video, audio and data) which together form a single presentation), **and said controller controls said transmitter, at the time of the software update for said video display apparatus** (Fig. 1, element 104 and Col. 4, lines 30-35, a remote control receiver which may receive commands from the remote control unit

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and provide these commands to the CPU of the transport decoder), to transmit the video data in said related information read from the recording medium to said video display apparatus (Col. 6, lines 67 and Col. 7, lines 1-11, data structures in the transport stream (including a multi-program transport stream including combinations programs (video, audio and data)) via said interface bus (Col. 3, lines 16-21 and Fig. 3, element 334, a communication channel which is a IEEE 1394 Bus which transmits software update data), using said first area (Col. 6, lines 42-45, the IEEE 1394 channel provides an ATSC transport stream which includes at least a data program but may also include one or more video or audio programs).

In reference to claim 5:

The data reproduction apparatus according to claim 2, wherein said related information includes operational guide information representing an operational procedure for the software update (Col. 7, lines 45-60, upgrading an existing digital television receiver to provide additional features or to fix errors in the existing program code. This can be done by recording the new program onto a digital video tape as a data program along with a video and audio program which describes and teases the new features).

In reference to claim 6:

The data reproduction apparatus according to claim 1, wherein said interface bus (Col. 6, lines 42-45, the IEEE 1394 channel bus) **includes a data line that transmits the video data, the audio data, and the additional data** (Col. 6, lines 42-45, the IEEE 1394 channel provides an ATSC transport stream which includes at least a data program but may also include one or more video or audio programs), **a clock line that transmits a clock signal** (Col. 4, lines 50-55, the DPLL is used to generate timing signals to synchronize processing operation), **and a control line**

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that transmits a control signal (see Fig. 1B, element 104, remote control receiver associated with the transporter), **wherein said first area is a video period of the video data** (Fig. 1B, element 121, video decoder), **and said second and third areas are present in a blanking interval of the video data** (Col. 4, lines 45-67, timing signals synchronize processing operations between video and audio), **and said transmitter outputs a clock signal to said clock line while transmitting, in synchronization with the clock signal** (Col. 4, lines 50-55, the DPLL is used to generate timing signals to synchronize processing operation), **the update software via the data line using said third area** (Fig. 3, elements 324, 330 and 334, a video stream, audio stream and data stream which are separate streams).

In reference to claim 7:

The data reproduction apparatus according to claim 1, wherein said update software includes identification information for identifying an object whose software should be updated, and said controller indicates a software update to said video display apparatus based on said identification information (Col. 7, lines 40-45, the software update data may also include verification features such as CRC codes or digital certificates which may be processed by other processes in the microprocessor to verify that the program code is correct and complete before it is used).

In reference to claim 8:

The data reproduction apparatus according to claim 7, further comprising a storage device that stores software for said controller (Fig. 1B and Fig. 2, element 103, memory to store software), **wherein said controller indicates a software update to said video display apparatus** (Fig. 1B, element 104, remote control receiver associated with the transporter), **when**

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said identification information represents said video display apparatus (Col. 7, lines 40-45, the software update data may also include verification features such as CRC codes or digital certificates which may be processed by other processes in the microprocessor to verify that the program code is correct and complete before it is used), **and updates the software stored in said storage device** (Col. 7, lines 45-50, upgrade an existing digital television receiver to provide additional features or fix errors in software code), **using the update software read from the recording medium** (Col. 7, lines 35-67, using software upgrade data read from the recording medium to update software), **when said identification information represents a software update for said controller** (Col. 7, lines 40-45, the software update data may also include verification features such as CRC codes or digital certificates which may be processed by other processes in the microprocessor to verify that the program code is correct and complete before it is used).

In reference to claim 9:

A video display apparatus capable of being connected to a data reproduction apparatus via an interface bus, comprising :

a receiver that receives video data and audio data transmitted by said data reproduction apparatus via said interface bus (Col. 3, lines 5-25, a digital television receiver is coupled to a display video information on a video display device. A IEEE 1394 bus is used to receive the digital audio video and data), **using a first area and a second area, respectively** (Fig. 2, elements 120 and 160, a video decoder and a audio decoder);

an audio output unit that outputs a sound (Col. 5, lines 35-55, audio signals at output ports; see also Fig. 1B element 163 and 164) **based on the audio data received by said receiver** (Fig. 1B, see elements 104, 102, 162 and 164: 104 receives the audio data, 102 and 162 transports the data and decodes the data, and 164 outputs the audio signals);

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a video display unit that displays an image (Col. 5, lines 60-67, a bit-mapped display which overlays the video image to produce the primary video output port) **based on the video data received by said receiver** (Fig. 1B, elements 104, 102, 121 and 146, 104 receives the video data, 102 and 162 transports the data and decodes the data, and 164 outputs the video signals);

a processor that controls said video display unit and said audio output unit (Fig. 2, element 102, a microprocessor controlling the video display unit and the audio display unit); **and**

a storage that stores software for said processor (see Fig. 2, elements 103(a) and 103(b), memory for the processor), **wherein said processor updates** (Col. 7, lines 35-45, where the data programs include software upgrade data), **upon reception of update software by said receiver that is transmitted via said interface bus** (Col. 3, lines 16-21 and Fig. 3, element 334, a communication channel which is a IEEE 1394 Bus which transmits software update data), **using a third area for transmission of additional data that is different from said first and second areas** (Fig. 3, elements 324, 330 and 334, a video stream, audio stream and data stream which are separate streams), **and indication of a software update by said data reproduction apparatus** (Col. 7, lines 1-10, packet identifier (PID) identifies data software upgrade packets), **the software stored in said storage using the update software received by said receiver** (Col. 7, lines 50-58, digital receiver is decoded the new program and storing it into memory).

In reference to claim 10:

The video display apparatus according to claim 9, wherein said processor controls said receiver to receive information related to the software update that is transmitted (Col. 4, lines 19-30, microprocessor processes the received transport packets to produce compressed audio, video and data information) **via said interface bus** (Col. 3, lines 16-21, communications

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channel is a IEEE 1394 bus. The digital VCR receives and provides digital audio, video and data program over the channel) **using said first area and/or said second area** (Fig. 2, elements 120 and 160, a video decoder and a audio decoder), **and causes said video display unit to display an image** (Col. 5, lines 60-67, a bit-mapped display which overlays the video image to produce the primary video output port) **and said audio output unit to output a sound** (Col. 5, lines 35-55, audio signals at output ports; see also Fig. 1B element 163 and 164), **based on the related information received by said receiver** (Col. 7, lines 40-45, the software update data may also include verification features such as CRC codes or digital certificates which may be processed by other processes in the microprocessor to verify that the program code is correct and complete before it is used).

In reference to claim 11:

The video display apparatus according to claim 9, further comprising:

an expansion function unit that implements an expansion function (Fig. 1A, a digital receiver attached to a VCR);

another processor that controls said expansion function unit (Col. 3, lines 25-30, the VCR could alternatively be a laptop with a processor); **and**

another storage that stores software for said processor for said expansion function (Fig. 2, elements 103(a) and 103(b), **wherein said processor transmits** (Fig. 2, microprocessor transports the video, audio and data streams), **upon indication of a software update for said other processor by said data reproduction apparatus** (Col. 7, lines 1-10, packet identifier (PID) identifies data software upgrade packets), **, the update software received by said receiver to said other processor while indicating the software update for said other**

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processor (Col. 7, lines 40-45, the software update data may also include verification features such as CRC codes or digital certificates which may be processed by other processes in the microprocessor to verify that the program code is correct and complete before it is used), **and said other processor updates the software stored in said other storage according to the indication by said processor** (Col. 7, lines 50-58, digital receiver is decoding the new program and storing it into memory), **using the update software transmitted from said processor** (Col. 7, lines 45-60, upgrading an existing digital receiver to provide additional features or fix errors by the digital receiver is decoding in the new program and storing it into memory).

In reference to claim 12:

A software updating system comprising:

a video display apparatus that operates according to software (Col. 2, lines 20-56, video display operates according to software); **and**

a data reproduction apparatus for reproducing data recorded in a recording medium (Col. 3, lines 15-25, the IEEE 1394 bus provides digital audio video and data to digital receiver (see Fig. 2, elements 110, 120 and 160), **and capable of being connected to said video display apparatus** (Col. 6, lines 67 and Col. 7, lines 1-11, data structures in the transport stream (including a multi-program transport stream including combinations programs (video, audio and data)) **via an interface bus** (Col. 3, lines 16-21 and Fig. 3, element 334, a communication channel which is a IEEE 1394 Bus which transmits software update data), **wherein said data reproduction apparatus includes:**

a transmitter that transmits video data and audio data read from the recording medium (Col. 2, lines 20-25, a television receiver which is coupled to a source of recorded video signal to

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receive an digital multi-program stream containing video, audio and data programs), **using a first area and a second area respectively** (Fig. 2, elements 120 and 160, a video decoder and a audio decoder) **to said video display apparatus via said interface bus** (Col. 3, lines 16-21, communications channel is a IEEE 1394 bus. The digital VCR receives and provides digital audio, video and data program over the channel); **and**

a controller that controls said transmitter to transmit, at the time of a software update for said video display apparatus (Fig. 1, element 104 and Col. 4, lines 30-35, a remote control receiver which may receive commands from the remote control unit and provide these commands to the CPU of the transport decoder), **update software read from the recording medium to said video display apparatus via said interface bus** (Col. 3, lines 16-21 and Fig. 3, element 334, a communication channel which is a IEEE 1394 Bus which transmits software update data), **using a third area for transmission of additional data that is different from said first and second areas** (Fig. 3, elements 324, 330 and 334, a video stream, audio stream and data stream which are separate streams), **while indicating the software update to said video display apparatus** (Col. 7, lines 40-45, the software update data may also include verification features such as CRC codes or digital certificates which may be processed by other processes in the microprocessor to verify that the program code is correct and complete before it is used), **and wherein said video display apparatus comprises:**

a receiver that receives video data and audio data transmitted by said data reproduction apparatus via said interface bus (Col. 3, lines 5-25, a digital television receiver is coupled to a display video information on a video display device. A IEEE 1394 bus is used to receive the digital audio video and data), **using a first area and a second area, respectively** (Fig. 2, elements 120 and 160, a video decoder and a audio decoder);

an audio output unit that outputs a sound (Col. 5, lines 35-55, audio signals at output ports; see also Fig. 1B element 163 and 164) **based on the audio data received by said receiver**

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(Fig. 1B, see elements 104, 102, 162 and 164: 104 receives the audio data, 102 and 162 transports the data and decodes the data, and 164 outputs the audio signals);

a video display unit that displays an image (Col. 5, lines 60-67, a bit-mapped display which overlays the video image to produce the primary video output port) **based on the video data received by said receiver** (Fig. 1B, elements 104, 102, 121 and 146, 104 receives the video data, 102 and 162 transports the data and decodes the data, and 164 outputs the video signals);

a processor that controls said video display unit and said audio output unit (Fig. 2, element 102, a microprocessor controlling the video display unit and the audio display unit); **and**

a storage that stores software for said processor (see Fig. 2, elements 103(a) and 103(b), memory for the processor), **wherein said processor updates** (Col. 7, lines 35-45, where the data programs include software upgrade data), **upon reception of update software by said receiver that is transmitted via said interface bus** (Col. 3, lines 16-21 and Fig. 3, element 334, a communication channel which is a IEEE 1394 Bus which transmits software update data), **using a third area for transmission of additional data that is different from said first and second areas** (Fig. 3, elements 324, 330 and 334, a video stream, audio stream and data stream which are separate streams), **and indication of a software update by said data reproduction apparatus** (Col. 7, lines 1-10, packet identifier (PID) identifies data software upgrade packets), **the software stored in said storage using the update software received by said receiver** (Col. 7, lines 50-58, digital receiver is decoded the new program and storing it into memory).

In reference to claim 13:

The software updating system according to claim 12, wherein said video display apparatus includes a television receiver (Col. 1, lines 5-15, the present invention relates generally to digital television receivers and updating the digital television receivers).

In reference to claim 14:

A software updating method for updating software for a video display apparatus using a data reproduction apparatus for reproducing data recorded in a recording medium, and capable of being connected to said video display apparatus via an interface bus, comprising the steps of:

transmitting, at the time of a software update for said video display apparatus (Fig. 1, element 104 and Col. 4, lines 30-35, a remote control receiver which may receive commands from the remote control unit and provide these commands to the CPU of the transport decoder), update software read by said data reproduction apparatus from the recording medium to said video display apparatus via said interface bus (Col. 3, lines 16-21 and Fig. 3, element 334, a communication channel which is a IEEE 1394 Bus which transmits software update data), using a third area for transmission of additional data other than a first area for transmission of video data and a second area for transmission of audio data (Fig. 3, elements 324, 330 and 334, a video stream, audio stream and data stream which are separate streams);

indicating the software update to said video display apparatus by said data reproduction apparatus (Col. 7, lines 1-10, packet identifier (PID) identifies data software upgrade packets);

receiving by said video display apparatus (Fig. 1, element 104 and Col. 4, lines 30-35, a remote control receiver which may receive commands from the remote control unit and provide these commands to the CPU of the transport decoder), upon indication of the software update by said data reproduction apparatus to said video display apparatus(Col. 7, lines 1-10, packet identifier (PID) identifies data software upgrade packets), the update software

transmitted via said interface bus using said third area (Fig. 3, elements 324, 330 and 334, a video stream, audio stream and data stream which are separate streams); **and**

updating the software for said video display apparatus using said received update software (Col. 7, lines 45-60, upgrading an existing digital television receiver to provide additional features or to fix errors in the existing program code. This can be done by recording the new program onto a digital video tape as a data program along with a video and audio program which describes and teases the new features).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jyoti D. Dave whose telephone number is 571-270-1470. The examiner can normally be reached on 7:30 AM to 5 PM Mon-Fri, Alt Fri. Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wei Zhen can be reached on 571-272-3708. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business

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Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO

Customer Service Representative or access to the automated information system, call

800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jyoti D Dave/

5/23/2008

Examiner, Art Unit 2191

/Wei Zhen/

Supervisory Patent Examiner, Art Unit 2191